

REMARKS/ARGUMENTS

Applicant wishes to initially thank the Examiner for the courtesies extended to applicants' attorney during the personal interview conducted on November 19, 2004. During that interview, applicants' attorney discussed the state of the claims and the prior art. The Examiner continues to contend that the central issue regarding claim 1 concerns simultaneously sealing the housing portions and the hollow fibers to each other and to the housing and whether that is taught in the art in combination with the "prior to cutting" limitation. With regard to claim 10, the Examiner indicates that the main issue concerns whether or not the potting compound connects the housing portions together in the Oscarsson reference. Finally, with regard to claim 14, the Examiner contends that the issue is whether the apertures of Oscarsson are actually "potting" apertures and whether these are accessible after the housing portions are connected together. While the Examiner has referred to some of the issues presented by this case, it is respectfully submitted that the present claims, particularly in view of the above-noted amendments to claims 1 and 10, emphasize the differences over Oscarsson, and that these claims are now clearly in condition for allowance, which action is respectfully solicited.

Firstly, since these amendments clearly place this application in superior condition for purposes of appeal, if not as applicants contend, in condition for allowance itself, it is submitted that entry of these amendments is clearly warranted at this time and that good cause exists for doing so. Such action is therefore respectfully solicited.

Claims 1-4 and 7-9 have been rejected as being anticipated or as obvious over Oscarsson. The Examiner contends that Oscarsson teaches a method for producing a hollow fiber filter with a housing having first and second portions (10a and 10b in FIG. 1); laying a plurality of fibers in the first portion (FIG. 1); forming the housing from the first and second portions (col. 2, lns. 56-62); connecting the fibers together on

at least one end by applying a potting compound (col. 3, lns. 14-32); and subsequently cutting the ends of the hollow fibers at least at one end (col. 3, lns. 14-37). Since the Examiner contends that Oscarsson teaches sealing the seams before or after it is taken off the wheel (col. 3, lns. 54-62), and potting to seal the ends of the fibers between themselves and the two halves of the housing (col. 3, lns. 14-31), he concludes that the limitation requiring connecting the hollow fibers together and to the filter housing and simultaneously sealing the first and second portions is taught thereby.

The Examiner further contends that since the potting seals the fibers and the housing together it would inherently seal the two portions together at least at the ends. The Examiner then specifically recognizes that Oscarsson does not teach simultaneously sealing the entire length of the first and second portions together along with potting the fiber ends, but even interpreting the claim in this manner, selecting or changing the order of a process step is said to be obvious because Oscarsson teaches sealing the two portions together at column 2, lines 54-63, citing *Ex Party Rubin*, 128 U.S.P.Q. 440 (Bd. App. 1959). The Examiner also cites *In re Burhans*, 154 F.2d 690, 69 U.S.P.Q. 330 (C.C.P.A. 1946) and *In re Gibson*, 39 F.2d 975, 5 U.S.P.Q. 230 (C.C.P.A. 1930). This rejection is respectfully traversed in view of the above amendments and arguments and for the reasons set forth hereinafter.

It is initially admitted that the teachings of Oscarsson, after setting forth winding the hollow fibers onto the half shell section, and then closing the upper half of the shell section over the filled half to complete the side walls of the shell core, then teach cutting the fibers between the shell cores and removing the cores from the winding device. All of this appears to not be in dispute. However, at column 2, lines 58 et seq., the Examiner has seized upon the fact that the patentee states that "the seams between sections 10a and 10b can be made fluid tight either before or after removal of the core,"

as somehow suggesting the present invention. This statement, however, clearly refers to the previous sentence, which includes a discussion of cutting the fibers to free the core. In either case, however (i.e., whether the sections are made fluid tight before or after the cutting step), it is clear that no reference has been made up to this point in Oscarsson's disclosure, to any potting, either of the fibers to each other or between the portions of the shell. The disclosure regarding fluid-tight sections in Oscarsson is simply a separate step of welding or the like in which the sections 10a and 10b are made fluid tight. Again, no reference is made to potting. Indeed, the subsequent paragraph refers to sealing the ends of the bundles to prevent subsequent potting compound from entering the fiber ends.

In any event, Oscarsson then goes on to teach a specific potting step which is solely intended, and in fact includes specific steps which are designed to prevent potting compound from being placed anywhere but at the ends of the fiber bundle. For this purpose, the assembly is placed on a rotating jig so that the potting fluid cannot move inwardly. It certainly cannot seal the halves of the housing together, firstly because they have already been sealed together according to this patentee, and secondly because they are prevented from doing so by positive steps incorporated in his procedure. When the Examiner thus refers to simultaneously sealing along the entire length of the first and second portions with the potting material, the Examiner incorrectly relies upon case law which relates to the order of steps. The failures of Oscarsson are not in connection with the order of steps, but in the nature of those steps themselves. Oscarsson requires additional steps because a separate step for sealing the housing has already taken place before any potting occurs. There is no way that Oscarsson teaches using potting compound to simultaneously seal the fibers and to seal the housing, and certainly not along its entire length. If the Examiner is going to continue to assert that it is merely a reversal of the order of the process steps which are *prima facie* obvious, it is respectfully requested that the Examiner explain precisely where these steps are taught in

the first place. Again, there is no teaching or suggestion whatsoever in Oscarsson for the specific claimed steps of the present invention. The claims require connecting the fibers together and to the filter housing and simultaneously sealing the first and second portions of the housing together by applying potting compound substantially along the entire length of the filter housing to provide a sealed housing and a sealed plurality of hollow fibers prior to cutting the ends of these fibers. Since it is beyond question that Oscarsson teaches a separate step of sealing the sections 10a and 10b together before any potting has occurred, and then teaches potting solely for the purpose of potting the ends of the fibers together, while taking positive action to prevent the potting compound from moving along the entire length of the housing, much less sealing it, it is clear that it is not the order, but the substance of the Oscarsson patent which is so lacking.

Claims 10 and 14 have been rejected as being anticipated by Oscarsson. With respect to claim 10, the Examiner contends that Oscarsson teaches a hollow fiber membrane tubular filter with a housing having first and second portions of half shells, a bundle of hollow fibers and the ends of the bundles potted with the housing. With respect to claim 14, the Examiner contends that the potting aperture in the claim is a part required for the process of making the filter and not a structural part of the finished product. In any case, such aperture is said to be shown in FIG. 2 at 23. This rejection is respectfully traversed in view of the above amendments and arguments and for the reasons set forth hereinafter.

With respect to claim 10, the same arguments set forth above apply at least equally thereto, since this claim also specifically requires connecting the first and second portions of the filter housing together substantially along the entire length of the filter housing. The potting compound cannot possibly accomplish this result according to the teachings of Oscarsson.

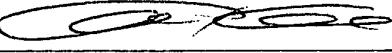
Claim 10 thus specifically requires that the potting connecting the bundle of hollow fibers at the first end of the tubular filter housing, connecting the bundle of hollow fibers to the filter housing, and connecting the first and second portions of the filter housing together substantially along the entire length of the filter housing. This is not and cannot be considered part of the product disclosed in Oscarsson. As for claim 14, besides the fact that this claim depends from claim 10 and includes all of the limitations thereof, the potting aperture referred to in claim 14, as shown for example at 53 in FIG. 6 hereof, in no way corresponds to line 23 in FIG. 2. The latter element refers to the line through which the potting compound is introduced into the end caps and maintained in a rotatable jig at the ends of the housing. As discussed above, these potting apertures could not possibly accomplish the results set forth in claim 10; namely, in addition to connecting the bundle of hollow fibers, and the hollow fibers to the filter housing, also connecting the first and second portions of the filter housing together substantially along the entire length thereof.

It is therefore respectfully submitted that all of the claims in this application now possess the requisite novelty, utility and unobviousness to warrant their immediate allowance, and such action is therefore respectfully solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

By 
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